Abstract

An optical detection system for flow cytometry that uses two or more light sources positioned laterally at different distances from a central axis of a flow stream for providing light through different parts of the flow stream. One or more lenses are used to focus the light from the two or more light sources through the flow stream and onto a common focal point or region on the opposite side of the flow stream. One or more light detectors are then placed at, near or around the common focal point or region. A processor or the like receives at least one output signal from the one or more light detectors to analyze and determine selected characteristics of the flow stream.